REMARKS

After the foregoing amendment, claims 2-3 and 5-10, as amended, are pending in the application. Claims 1 and 4 have been canceled. Claims 2-3 and 5-6 have been amended to more particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 6-10 are new. Applicants submit that no new matter has been added to the application by the Amendment.

Claim Objections

The Examiner objected to claims 2 and 5 for using the term bicast cell and claims 3 and 6 for using the term routing cell. Applicants respectfully traverse the objection.

Applicants have consistently used the term switching "cell" in the specification to denote a 2X2 switching element (see Definition A5 on page 29 of the application). Applicants have further defined respectively a "bicast cell" (see Definition G6 on page 170) and a "routing cell" (see Definition G4 on pages 160-161) to have particular features.

"An applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning" (MPEP 2106). Applicants have clearly set forth definitions of a bicast cell and a routing cell in the specification. Further, changing the claim language to other than a "cell" would make the claims inconsistent with language in the specification. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objections to claims 2, 3, 5 and 6.

Rejection - 35 U.S.C. § 103

The Examiner rejected claims 2, 3, 5 and 6 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,829,237 (Carson et al.) in view of Park et al. and further in view of U.S. Patent No. 5,689,506 (Chiussi et al.).

With regard to claims 2 and 5, the Examiner states that Carson fails to disclose bicast switching elements that receive 0-bound, 1-bound, and bicast packet types but that Park discloses bicast switching elements and Chiussi et al. discloses a method and a system that uses idle packets, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Carson et al. to incorporate bicast switching elements that

receive 0-bound, 1-bound, and bicast packet types and to incorporate idle packets as taught by Chiussi et al. Applicants respectfully traverse the rejection of claims 2 and 5.

Amended claims 2 and 5 each recite using a bicast cell as a switching element. A bicast cell is defined at page 170 of the application as:

> *Definition G6: "bicast cell". A "bicast cell" is an expander cell under the following in-band-control.*
>
> *If one of the two inputs presents a bicast packet and the other presents an idle packet, the bicast packet is "bicasted", which means:*
>
> *(1) a copy of the bicast packet is sent to each of the two outputs through the bicast-0 or bicast-1 connection state;*
>
> *(2) the copy received by output-0 assumes the status of a 0-bound packet instead of a bicast packet, i.e., the control signal of the copy received by output-0 is set to be `0-bound`; and*
>
> *(3) the copy received by output-1 assumes the status of a 1-bound packet instead of a bicast packet, i.e., the control signal of the copy received by output-1 is set to be `1-bound`.*

An expander cell (see above) is described on page 169 and defined in Table 7 on page 170 as:

TABLE 7

Connection state of the expanding cell		Signal at input-1 "idle"	"0-bound"	"1-bound"	"bicast"
Signal at input-0	"idle"	Any	Cross	Bar	Bicast-1
	"0-bound"	Bar	Contention for output-0	Bar	Bar
	"1-bound"	Cross	Cross	Contention for output-1	Cross
	"bicast"	Bicast-0	Cross	Bar	Bar/Cross

As described on pages 169-170, a bicast cell is characterized by a logic which determines the switching state of the 2X2 switch for any combination of 0-bound,

1-bound, idle and bicast signals which are simultaneously applied to the input of the bicast cell.

As stated by the Examiner, Carson et al. does not disclose a bicast cell. The switching elements disclosed by Park are not bicast cells because the switching elements disclosed by Park do not identify a switching state for every combination of 0-bound, 1-bound, idle and bicast signals which are simultaneously applied to the two inputs of the switch. Neither does Chiussi et al. disclose that the ASX and AXB switch modules include a switching state for every combination of 0-bound, 1-bound, idle and bicast signals applied to the two inputs of the switch.

With regard to claims 3 and 6, the Examiner states that Carson fails to disclose routing cells as switching elements that receive 0-bound, 1-bound, and bicast packet types but that Park discloses routing switching elements and Chiussi et al. discloses a method and a system that uses idle packets, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Carson et al. to incorporate a method that routes idle packets. Applicants respectfully traverse the rejection of claims 3 and 6.

As described at pages 160-161 and shown in Table 3, a routing cell is a 2X2 switch for which a switching state is defined for each combination of a 0-bound, 1-bound and idle signals occurring simultaneously at the two inputs of the switch.

TABLE 3

		Input-1 control signal		
Connection state		0-bound	idle	1-bound
Input-0 control Signal	0-bound	Any	Bar	Bar
	idle	Cross	Any	Bar
	1-bound	Cross	Cross	Any

As stated by the Examiner, Carson et al. does not disclose a routing cell. The switching elements disclosed by Park are not routing cells because the switching elements disclosed by Park do not identify a switching state for every combination of 0-bound, 1-bound, and idle signals applied simultaneously to the two inputs of the switch. Neither does Chiussi et al. disclose that the ASX and AXB switch modules include a

switching state for every combination of 0-bound, 1-bound and idle signals applied to the two inputs of the switch.

Applicants submit that the terms bicast cell and routing cell are entitled to the definitions expressly stated in the specification. Based on the aforementioned definitions, Applicants submit that the combination of Carson et al., Park et al. and Chiussi et al. does not make claims 2-3 and 4-6 obvious. Accordingly Applicants respectfully request reconsideration and withdrawal of the §103 rejection of claims 2-3 and 5-6.

New claims 6-10

New claims 6-10, abstracted from claims 2, 3, 5 and 6 respectively, depend respectively from allowable claims 2, 3, 5 and 6. Accordingly, claims 6-10 are allowable, at least by their dependency.

Conclusion

Insofar as the Examiner's objections and rejections have been fully addressed, the instant application, including claims 2-3 and 5-10, is in condition for allowance and Notice of Allowability of claims 2-3 and 5-10 is therefore earnestly solicited.

Respectfully submitted,

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(Date)

By: _____

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